Project Completion Report OWEB Grant 99-274 Reconnect the Clatskanie River and the Westport Slough Lower Columbia River Watershed Council

## 1. Narrative Description of the project:

## **Background:**

This project restored the historic flow of the Clatskanie River by reconnecting it with the Westport Slough. A 1938 Works Progress Administration Project had closed the connection. Water quality and fish passage were both adversely affected by the closure. Fish were unable to follow their historic route and fish use of the eight streams that flow into Westport Slough had diminished. Water quality had gradually become degraded due to tidal activity that allowed the sediment load to be dropped at the head of Westport Slough causing aggradation. There was limited water exchange to refresh the Westport Slough. Temperature was high, dissolved oxygen levels were low, conductivity readings were extremely high and turbidity levels were high.

## **Implementation:**

As proposed a 12 foot arched culvert was placed in the plug allowing water exchange and fish passage. The bank was stabilized with large rock and native vegetation. Work was done according to initially proposed plans.

## **Lessons and Recommendations:**

The grass planted in the revegetation effort was successful. The weather did not cooperate with the planting of trees and shrubs and they received inadequate water thus a high mortality rate. Some replanting will be required. Willows planted in tidally affected areas are responding favorably.

The culvert could have been placed lower in the streambed to compensate for tidal action yet the project goals of fish passage and water quality improvement have been met.

Tidal flow and low water mark will be more closely evaluated in future projects. Greater attention will be given to weather trends to improve plant survival.